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CIK, MIROSLAV
HOEFNAGEL, EVERT W.

<120> NEUROTROPHIC FACTOR RECEPTOR

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<141> 2001-12-19

<150> PCT/EP00/04918
<151> 2000-05-26

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<151> 1999-06-29

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<170> PatentIn Ver. 3.2

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<213> Rattus rattus

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<213> Rattus rattus

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<212> PRT
<213> Rattus rattus

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Leu Leu Phe Cys Gly Cys Glu Gly Pro Ala Cys Ala Glu Arg Arg Arg
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Gln Thr Phe Ala Pro Ala Cys Ala Phe Ser Gly Pro Gln Leu Ala Pro
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Tyr Ala Gly Leu Val Gly Thr Val Val Thr Pro Asn Tyr Leu Asp Asn
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Val Ser Ala Arg Val Ala Pro Trp Cys Gly Cys Glu Ala Ser Gly Asn
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Arg Arg Glu Glu Cys Glu Ala Phe Arg Lys Leu Phe Thr Arg Asn Pro
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Cys Leu Asp Gly Ala Ile Gln Ala Phe Asp Ser Ser Gln Pro Ser Val
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Leu Gln Asp Gln Trp Asn Pro Tyr Gln Asn Ala Gly Cys Cys Phe Leu
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<213> Rattus rattus

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Glu Gly Asn Arg Cys Val Glu Ala Ala Glu Ala Cys Thr Ala Asp Glu
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Gln Cys Gln Gln Leu Arg Ser Glu Tyr Val Ala Gln Cys Leu Gly Arg
     50                  55                  60

Ala Gly Trp Arg Gly Pro Gly Ser Cys Val Arg Ser Arg Cys Arg Arg
 65                  70                  75                  80

Ala Leu Arg Arg Phe Phe Ala Arg Gly Pro Pro Ala Leu Thr His Ala
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Leu Leu Phe Cys Gly Cys Glu Gly Pro Ala Cys Ala Glu Arg Arg Arg
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Gln Thr Phe Ala Pro Ala Cys Ala Phe Ser Gly Pro Gln Leu Ala Pro
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Pro Ser Cys Leu Lys Pro Leu Asp Arg Cys Glu Arg Ser Arg Arg Cys
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Arg Pro Arg Leu Phe Ala Phe Gln Ala Ser Cys Ala Pro Ala Pro Gly
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Ser Arg Asp Gly Cys Pro Glu Glu Gly Gly Pro Arg Cys Leu Arg Ala
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Tyr Ala Gly Leu Val Gly Thr Val Val Thr Pro Asn Tyr Leu Asp Asn
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Val Ser Ala Arg Val Ala Pro Trp Cys Gly Cys Glu Ala Ser Gly Asn
195 200 205

Arg Arg Glu Glu Cys Glu Ala Phe Arg Lys Leu Phe Thr Arg Asn Pro
210 215 220

Cys Leu Asp Gly Ala Ile Gln Ala Phe Asp Ser Ser Gln Pro Ser Val
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<210> 12
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<210> 13
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<210> 14
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<400> 14
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<210> 15
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<210> 17
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<210> 18
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<210> 19
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<210> 32
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<212> PRT
<213> Gallus gallus

<400> 32

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Cys Thr Asn Asp Pro Ile Cys Ser Ser Lys Phe Arg Thr Leu Arg Gln
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Cys Ile Ala Gly Asn Gly Ala Asn Lys Leu Gly Pro Asp Ala Lys Asn
     50                  55                  60

Gln Cys Arg Ser Thr Val Thr Ala Leu Leu Ser Ser Gln Leu Tyr Gly
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Cys Lys Cys Lys Arg Gly Met Lys Lys Glu Lys His Cys Leu Ser Val
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Tyr Trp Ser Ile His His Thr Leu Met Glu Gly Met Asn Val Leu Glu
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Ser Ser Pro Tyr Glu Pro Phe Ile Arg Gly Phe Asp Tyr Val Arg Leu
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Asp Thr Cys Asn Arg Ser Lys Cys His Lys Ala Leu Arg Lys Phe Phe
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Asp Arg Val Pro Pro Glu Tyr Thr His Glu Leu Leu Phe Cys Pro Cys
        195                 200                 205

Glu Asp Thr Ala Cys Ala Glu Arg Arg Arg Gln Thr Ile Val Pro Ala
    210                 215                 220

Cys Ser Tyr Glu Ser Lys Glu Lys Pro Asn Cys Leu Ala Pro Leu Asp
225                 230                 235                 240

Ser Cys Arg Glu Asn Tyr Val Cys Arg Ser Arg Tyr Ala Glu Phe Gln
                245                 250                 255

Phe Asn Cys Gln Pro Ser Leu Gln Thr Ala Ser Gly Cys Arg Arg Asp
            260                 265                 270

Ser Tyr Ala Ala Cys Leu Leu Ala Tyr Thr Gly Ile Ile Gly Ser Pro
        275                 280                 285

Ile Thr Pro Asn Tyr Ile Asp Asn Ser Thr Ser Ser Ile Ala Pro Trp
    290                 295                 300

Cys Thr Cys Asn Ala Ser Gly Asn Arg Gln Glu Glu Cys Glu Ser Phe
305                 310                 315                 320

Leu His Leu Phe Thr Asp Asn Val Cys Leu Gln Asn Ala Ile Gln Ala
                325                 330                 335

Phe Gly Asn Gly Thr Tyr Leu Asn Ala Ala Thr Ala Pro Ser Ile Ser
            340                 345                 350

Pro Thr Thr Gln Met Tyr Lys Gln Glu Arg Asn Ala Asn Arg Ala Ala
        355                 360                 365

Ala Thr Leu Ser Glu Asn Ile Phe Glu His Leu Gln Pro Thr Lys Val
    370                 375                 380

Ala Gly Glu Glu Arg Leu Leu Arg Gly Ser Thr Arg Leu Ser Ser Glu
385                 390                 395                 400

Thr Ser Ser Pro Ala Ala Pro Cys His Gln Ala Ala Ser Leu Leu Gln
                405                 410                 415

Leu Trp Leu Pro Pro Thr Leu Ala Val Leu Ser His Phe Met Met
            420                 425                 430
```

<210> 33
<211> 397
<212> PRT
<213> Mus musculus

<400> 33

```
Met Gly Leu Ser Trp Ser Pro Arg Pro Pro Leu Leu Met Ile Leu Leu
  1               5                  10                  15

Leu Val Leu Ser Leu Trp Leu Pro Leu Gly Ala Gly Asn Ser Leu Ala
             20                  25                  30

Thr Glu Asn Arg Phe Val Asn Ser Cys Thr Gln Ala Arg Lys Lys Cys
         35                  40                  45

Glu Ala Asn Pro Ala Cys Lys Ala Ala Tyr Gln His Leu Gly Ser Cys
     50                  55                  60

Thr Ser Ser Leu Ser Arg Pro Leu Pro Leu Glu Glu Ser Ala Met Ser
 65                  70                  75                  80

Ala Asp Cys Leu Glu Ala Ala Glu Gln Leu Arg Asn Ser Ser Leu Ile
                 85                  90                  95

Asp Cys Arg Cys His Arg Arg Met Lys His Gln Ala Thr Cys Leu Asp
            100                 105                 110

Ile Tyr Trp Thr Val His Pro Ala Arg Ser Leu Gly Asp Tyr Glu Leu
        115                 120                 125

Asp Val Ser Pro Tyr Glu Asp Thr Val Thr Ser Lys Pro Trp Lys Met
    130                 135                 140

Asn Leu Ser Lys Leu Asn Met Leu Lys Pro Asp Ser Asp Leu Cys Leu
145                 150                 155                 160

Lys Phe Ala Met Leu Cys Thr Leu His Asp Lys Cys Asp Arg Leu Arg
                165                 170                 175

Lys Ala Tyr Gly Glu Ala Cys Ser Gly Ile Arg Cys Gln Arg His Leu
            180                 185                 190

Cys Leu Ala Gln Leu Arg Ser Phe Phe Glu Lys Ala Ala Glu Ser His
        195                 200                 205

Ala Gln Gly Leu Leu Leu Cys Pro Cys Ala Pro Glu Asp Ala Gly Cys
    210                 215                 220

Gly Glu Arg Arg Arg Asn Thr Ile Ala Pro Ser Cys Ala Leu Pro Ser
225                 230                 235                 240

Val Thr Pro Asn Cys Leu Asp Leu Arg Ser Phe Cys Arg Ala Asp Pro
                245                 250                 255

Leu Cys Arg Ser Arg Leu Met Asp Phe Gln Thr His Cys His Pro Met
            260                 265                 270
```

```
Asp Ile Leu Gly Thr Cys Ala Thr Glu Gln Ser Arg Cys Leu Arg Ala
        275                 280                 285

Tyr Leu Gly Leu Ile Gly Thr Ala Met Thr Pro Asn Phe Ile Ser Lys
    290                 295                 300

Val Asn Thr Thr Val Ala Leu Ser Cys Thr Cys Arg Gly Ser Gly Asn
305                 310                 315                 320

Leu Gln Asp Glu Cys Glu Gln Leu Glu Arg Ser Phe Ser Gln Asn Pro
                325                 330                 335

Cys Leu Val Glu Ala Ile Ala Ala Lys Met Arg Phe His Arg Gln Leu
            340                 345                 350

Phe Ser Gln Asp Trp Ala Asp Ser Thr Phe Ser Val Val Gln Gln Gln
        355                 360                 365

Asn Ser Asn Pro Ala Leu Arg Leu Gln Pro Arg Leu Pro Ile Leu Ser
    370                 375                 380

Phe Ser Ile Leu Pro Leu Ile Leu Leu Gln Thr Leu Trp
385                 390                 395


<210> 34
<211> 444
<212> PRT
<213> Rattus rattus

<400> 34
Met Ile Leu Ala Asn Ala Phe Cys Leu Phe Phe Phe Leu Asp Glu Thr
  1               5                  10                  15

Leu Arg Ser Leu Ala Ser Pro Ser Ser Leu Gln Gly Ser Glu Leu His
            20                  25                  30

Gly Trp Arg Pro Gln Val Asp Cys Val Arg Ala Asn Glu Leu Cys Ala
        35                  40                  45

Ala Glu Ser Asn Cys Ser Ser Arg Tyr Arg Thr Leu Arg Gln Cys Leu
    50                  55                  60

Ala Gly Arg Asp Arg Asn Thr Met Leu Ala Asn Lys Glu Cys Gln Ala
65                  70                  75                  80

Ala Leu Glu Val Leu Gln Glu Ser Pro Leu Tyr Asp Cys Arg Cys Lys
                85                  90                  95

Arg Gly Met Lys Lys Glu Leu Gln Cys Leu Gln Ile Tyr Trp Ser Ile
            100                 105                 110

His Leu Gly Leu Thr Glu Gly Glu Glu Phe Tyr Glu Ala Ser Pro Tyr
        115                 120                 125

Glu Pro Val Thr Ser Arg Leu Ser Asp Ile Phe Arg Leu Ala Ser Ile
    130                 135                 140
```

```
Phe Ser Gly Thr Gly Thr Asp Pro Ala Val Ser Thr Lys Ser Asn His
145                 150                 155                 160

Cys Leu Asp Ala Ala Lys Ala Cys Asn Leu Asn Asp Asn Cys Lys Lys
                165                 170                 175

Leu Arg Ser Ser Tyr Ile Ser Ile Cys Asn Arg Glu Ile Ser Pro Thr
            180                 185                 190

Glu Arg Cys Asn Arg Arg Lys Cys His Lys Ala Leu Arg Gln Phe Phe
        195                 200                 205

Asp Arg Val Pro Ser Glu Tyr Thr Tyr Arg Met Leu Phe Cys Ser Cys
    210                 215                 220

Gln Asp Gln Ala Cys Ala Glu Arg Arg Arg Gln Thr Ile Leu Pro Ser
225                 230                 235                 240

Cys Ser Tyr Glu Asp Lys Glu Lys Pro Asn Cys Leu Asp Leu Arg Ser
                245                 250                 255

Leu Cys Arg Thr Asp His Leu Cys Arg Ser Arg Leu Ala Asp Phe His
            260                 265                 270

Ala Asn Cys Arg Ala Ser Tyr Arg Thr Ile Thr Ser Cys Pro Ala Asp
        275                 280                 285

Asn Tyr Gln Ala Cys Leu Gly Ser Tyr Ala Gly Met Ile Gly Phe Asp
    290                 295                 300

Met Thr Pro Asn Tyr Val Asp Ser Asn Pro Thr Gly Ile Val Val Ser
305                 310                 315                 320

Pro Trp Cys Asn Cys Arg Gly Ser Gly Asn Met Glu Glu Glu Cys Glu
                325                 330                 335

Lys Phe Leu Arg Asp Phe Thr Glu Asn Pro Cys Leu Arg Asn Ala Ile
            340                 345                 350

Gln Ala Phe Gly Asn Gly Thr Asp Val Asn Met Ser Pro Lys Gly Pro
        355                 360                 365

Ser Leu Pro Ala Thr Gln Ala Pro Arg Val Glu Lys Thr Pro Ser Leu
    370                 375                 380

Pro Asp Asp Leu Ser Asp Ser Thr Ser Leu Gly Thr Ser Val Ile Thr
385                 390                 395                 400

Thr Cys Thr Ser Ile Gln Glu Gln Gly Leu Lys Ala Asn Asn Ser Lys
                405                 410                 415

Glu Leu Ser Met Cys Phe Thr Glu Leu Thr Thr Asn Ile Ser Pro Gly
            420                 425                 430

Ser Lys Lys Val Ile Lys Leu Asn Ser Gly Ser Ser
        435                 440
```

<210> 35
<211> 468
<212> PRT
<213> Rattus rattus

<400> 35

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Met Phe Leu Ala Thr Leu Tyr Phe Ala Leu Pro Leu Leu Asp Leu Leu
  1               5                  10                  15

Met Ser Ala Glu Val Ser Gly Gly Asp Arg Leu Asp Cys Val Lys Ala
             20                  25                  30

Ser Asp Gln Cys Leu Lys Glu Gln Ser Cys Ser Thr Lys Tyr Arg Thr
         35                  40                  45

Leu Arg Gln Cys Val Ala Gly Lys Glu Thr Asn Phe Ser Leu Thr Ser
     50                  55                  60

Gly Leu Glu Ala Lys Asp Glu Cys Arg Ser Ala Met Glu Ala Leu Lys
 65                  70                  75                  80

Gln Lys Ser Leu Tyr Asn Cys Arg Cys Lys Arg Gly Met Lys Lys Glu
                 85                  90                  95

Lys Asn Cys Leu Arg Ile Tyr Trp Ser Met Tyr Gln Ser Leu Gln Gly
            100                 105                 110

Asn Asp Leu Leu Glu Asp Ser Pro Tyr Glu Pro Val Asn Ser Arg Leu
        115                 120                 125

Ser Asp Ile Phe Arg Ala Val Pro Phe Ile Ser Asp Val Phe Gln Gln
    130                 135                 140

Val Glu His Ile Ser Lys Gly Asn Asn Cys Leu Asp Ala Ala Lys Ala
145                 150                 155                 160

Cys Asn Leu Asp Asp Thr Cys Lys Lys Tyr Arg Ser Ala Tyr Ile Thr
                165                 170                 175

Pro Cys Thr Thr Ser Met Ser Asn Glu Val Cys Asn Arg Arg Lys Cys
            180                 185                 190

His Lys Ala Leu Arg Gln Phe Phe Asp Lys Val Pro Ala Lys His Ser
        195                 200                 205

Tyr Gly Met Leu Phe Cys Ser Cys Arg Asp Ile Ala Cys Thr Glu Arg
    210                 215                 220

Arg Arg Gln Thr Ile Val Pro Val Cys Ser Tyr Glu Glu Arg Glu Arg
225                 230                 235                 240

Pro Asn Cys Leu Ser Leu Gln Asp Ser Cys Lys Thr Asn Tyr Ile Cys
                245                 250                 255

Arg Ser Arg Leu Ala Asp Phe Phe Thr Asn Cys Gln Pro Glu Ser Arg
            260                 265                 270
```

```
Ser Val Ser Asn Cys Leu Lys Glu Asn Tyr Ala Asp Cys Leu Leu Ala
        275                 280                 285

Tyr Ser Gly Leu Ile Gly Thr Val Met Thr Pro Asn Tyr Val Asp Ser
    290                 295                 300

Ser Ser Leu Ser Val Ala Pro Trp Cys Asp Cys Ser Asn Ser Gly Asn
305                 310                 315                 320

Asp Leu Glu Asp Cys Leu Lys Phe Leu Asn Phe Phe Lys Asp Asn Thr
                325                 330                 335

Cys Leu Lys Asn Ala Ile Gln Ala Phe Gly Asn Gly Ser Asp Val Thr
            340                 345                 350

Met Trp Gln Pro Ala Pro Pro Val Gln Thr Thr Thr Ala Thr Thr Thr
        355                 360                 365

Thr Ala Phe Arg Val Lys Asn Lys Pro Leu Gly Pro Ala Gly Ser Glu
    370                 375                 380

Asn Glu Ile Pro Thr His Val Leu Pro Pro Cys Ala Asn Leu Gln Ala
385                 390                 395                 400

Gln Lys Leu Lys Ser Asn Val Ser Gly Ser Thr His Leu Cys Leu Ser
                405                 410                 415

Asp Ser Asp Phe Gly Lys Asp Gly Leu Ala Gly Ala Ser Ser His Ile
            420                 425                 430

Thr Thr Lys Ser Met Ala Ala Pro Pro Ser Cys Ser Leu Ser Ser Leu
        435                 440                 445

Pro Val Leu Met Leu Thr Ala Leu Ala Ala Leu Leu Ser Val Ser Leu
    450                 455                 460

Ala Glu Thr Ser
465
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<210> 36
<211> 13
<212> DNA
<213> Rattus rattus

<400> 36
gaggtaagga ggt 13

<210> 37
<211> 13
<212> DNA
<213> Rattus rattus

<400> 37
ccctcaccag ggt 13

<210> 38
<211> 13
<212> DNA
<213> Rattus rattus

<400> 38
ccggtgcgtg cgg 13

<210> 39
<211> 13
<212> DNA
<213> Rattus rattus

<400> 39
gcgcgcgcag gcc 13

<210> 40
<211> 13
<212> DNA
<213> Rattus rattus

<400> 40
taggtacgct ggg 13

<210> 41
<211> 13
<212> DNA
<213> Rattus rattus

<400> 41
gtccctgcag gca 13

<210> 42
<211> 13
<212> DNA
<213> Rattus rattus

<400> 42
tgggtgaggg ggc 13

<210> 43
<211> 13
<212> DNA
<213> Rattus rattus

<400> 43
cactccatag atg 13

<210> 44
<211> 13
<212> DNA
<213> Rattus rattus

<400> 44
cgggtaggta tgg 13

<210> 45
<211> 13
<212> DNA
<213> Rattus rattus

<400> 45
tgggtgctgt ttc 13

<210> 46
<211> 13
<212> DNA
<213> Rattus rattus

<400> 46
ttgtcccaag gtg 13

<210> 47
<211> 13
<212> DNA
<213> Rattus rattus

<400> 47
cccttctcag gca 13

<210> 48
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
6xHis tag

<400> 48
His His His His His His
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